

## Muhammad Abbas

Adjunct Faculty

College of Electrical & Mechanical Engineering

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## About

Dr. Muhammad Abbas is working as Adjunct Faculty in the College of Electrical & Mechanical Engineering. Dr. Muhammad Abbas has a PhD in Information System. Dr. Muhammad Abbas has published 50 research articles & conference papers having a citation count of 136, carried out 2 projects and filed 0 intellectual property.

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## Qualifications

<b>PhD in Information System</b> University of Manchester , England	2007 - 2011
<b>MS in nformation System Engineering</b> University of Manchester , United Kingdom	2006 - 2007
<b>BE in Bachelor of Engineering</b> NED UET Karachi , Pakistan	1987 - 1992

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## Experience

<b>Adjunct Faculty</b> College of Electrical & Mechanical Engineering	2023- Present
<b>Adjunct Faculty</b> College of Electrical & Mechanical Engineering	2020 - 2023
<b>Defence Faculty</b> College of Electrical & Mechanical Engineering	2020 - 2020
<b>Defence Faculty</b> College of Electrical & Mechanical Engineering	2012 - 2020
<b>Faculty</b> NUST/EME , NUST/EME, Rawalpindi	2012 - 2020
<b>Brig</b> Pakistan Army , College of EME	1993- Present

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## Awards

<b>Tamgha-i-Imtiaz(Military)</b> GHQ	2016
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## Professional Memberships

<b>PEC</b>	Since 1993
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Research Projects

National Projects

<b>Duplicate Cleansing (Duplicate record detection and merging)</b> Funding Agency: NESCOM Amount: PKR 250,000.00 Status: Completed	2017
<b>Remote Operated Weapon System (ROWS)</b> Funding Agency: NUST Amount: PKR 300,000.00 Status: Completed	2018

International Projects

Research Articles

<b>Vision Transformer and Language Model based Radiology Report Generation</b> <i>Mashood Mohammad Mohsan Muhammad Usman Akram Ghulam Rasool Norah Saleh Alghamdi Muhammad Abdullah Aamer Baqai Muhammad Abbas IEEE Access</i> , Volume 11, Pages 1814-1824 Impact Factor: 3.476   Quartile: 2   Citations: 30 DOI: 10.1109/ACCESS.2022.3232719	2023
<b>The Impact of Technology Audit on Technology Capabilities in Pakistani Training Institutes</b> <i>Muhammad Abbas Asjad Shahzad Journal of Engineering Management and Competitiveness</i> , Volume 12, Issue 2, Pages 151-164 Impact Factor: N/A DOI: 10.5937/JEMC2202151S	2022
<b>A Framework for Classification of Gabor Based Frequency Selective Bone Radiographs Using CNN</b> <i>Rehan Nemati Farhan Riaz Ali Hassan Saad Rehman Muhammad Ajmal Azad Muhammad Abbas Farhan Hussain Saddam Rubab Arabian Journal of Science and Engineering</i> , Volume 46, Pages 4141-4152 Impact Factor: 2.807   Quartile: 2   Citations: 2 DOI: <a href="https://doi.org/10.1007/s13369-021-05339-7">https://doi.org/10.1007/s13369-021-05339-7</a>	2021
<b>Blood Glucose Level Prediction of Diabetic Type 1 Patients Using Nonlinear Autoregressive Neural Networks</b> <i>Usman Qamar Muhammad Asad Muhammad Abbas Journal of Healthcare Engineering</i> , Volume 2021, Article ID 6611091, 7 pages Impact Factor: 3.822   Quartile: 2   Citations: 15 DOI: <a href="https://doi.org/10.1155/2021/6611091">https://doi.org/10.1155/2021/6611091</a>	2021
<b>Approximate Proximal Gradient-Based Correlation Filter for Target Tracking in Videos: A Unified Approach</b> <i>Aimal Khan Haris Masood Saad Rehman Farhan Riaz Ali Hassan Muhammad Abbas Arabian Journal for Science and Technology</i> , Volume 44, Issue 11, Pages 9363-9380 Impact Factor: 1.711   Quartile: 2   Citations: 7 DOI: 10.1007/s13369-019-03861-3	2019
<b>Mathematical model based traffic violations identification</b> <i>Fozia Mehboob Muhammad Abbas Abdul Rauf Computational and Mathematical Organization Theory</i> , Volume 25, Pages 302–318 Impact Factor: 1.558   Quartile: 2   Citations: 3 DOI: <a href="https://doi.org/10.1007/s10588-018-9264-x">https://doi.org/10.1007/s10588-018-9264-x</a>	2019
<b>Active contour-based clutter defiance scheme for correlation filters</b> <i>Ahmed Bilal Awan Asim Dilawar Bakhshi Muhammad Abbas Saad Rehman Electronics Letters</i> , Volume 55, Issue 9, Pages 525-527 Impact Factor: 1.316   Quartile: 3   Citations: 4 DOI: 10.1049/el.2018.7955	2019
<b>On the mutual information of relaying protocols</b> <i>Saad Rehman Aimal Khan Muhammad Abbas Ayaz Ahmad Physical Communication</i> , Volume 30, Pages 33-42 Impact Factor: 1.451   Quartile: 3   Citations: 7	2018

DOI: 10.1016/j.phycom.2018.07.005

**Trajectory based vehicle counting and anomalous event visualization in smart cities**

2018

Fozia Mehboob Muhammad Abbas Richard Jiang Abdul Rauf Shoab Ahmed Khan Saad Rehman

Cluster Computing-The Journal of Networks Software Tools and Applications, Volume: 21 Issue: 1 Pages: 443-452 Special Issue: SI

**Impact Factor:** 1.851 | **Quartile:** 2 | **Citations:** 13

DOI: 10.1007/s10586-017-0885-5

**Self-Organizing Hierarchical Particle Swarm Optimization of Correlation Filters for Object Recognition**

2017

Sara Tehsin Saad Rehman Muhammad Omer Bin Saeed Farhan Riaz Ali Hassan Muhammad Abbas Rupert Young Mohammad S. Alam

IEEE Access , Volume 5, Pages 24495-24502

**Impact Factor:** 3.557 | **Quartile:** 1 | **Citations:** 24

DOI: 10.1109/ACCESS.2017.2762354

**Glyph-based video visualization on Google Map for surveillance in smart cities**

2017

Fozia Mehboob Muhammad Abbas Shoab A. Khan Richard Jiang Ahmed Bouridane Saad Rehman

EURASIP Journal on Image and Video Processing, Article Number: 28

**Impact Factor:** 1.737 | **Quartile:** 2 | **Citations:** 15

DOI: 10.1186/s13640-017-0175-4

**SAP-ERP Implementation: Change Management Model using Qualitative Approach**

2016

Muhammad Umar Nawar Khan Mujtaba Hassan Agha Muhammad Abbas

International Journal of Computer Science and Network Security, Volume 16, Issue 6, Pages 9-13

**Impact Factor:** -

DOI: <https://www.semanticscholar.org/paper/SAP-ERP-Implementation-%3A-Change-Management-Model-Umar-Khan/edd3fbc1bfc6700103402e85a8100555c2b7e843>

**Exploring the Factors Affecting ERP Implementation Quality**

2016

M. Umar Nawar Khan Muhammad Hassan Agha Muhammad Abbas

Journal of Quality and Technology Management, Volume 12, Issue 1, Pages 137 - 155

**Impact Factor:** 0

DOI: [http://pu.edu.pk/images/journal/iqtm/PDF-FILES/06-Exploring\\_jun\\_16.pdf](http://pu.edu.pk/images/journal/iqtm/PDF-FILES/06-Exploring_jun_16.pdf)

**A Logic Based Framework for the Management of Changing Software Requirement**

2015

Umm-e-Habiba Syed Mohtashim Abbas Bokhari Muhammad Abbas

Lecture Notes on Software Engineering, Volume 3, Issue 4, Pages 275-278

**Impact Factor:** 0

DOI: 10.7763/LNSE.2015.V3.203

**Limitations of Service Oriented Architecture and its Combination with Cloud Computing**

2015

Syed Mohtashim Abbas Bokhari Farooque Azam Muhammad Abbas Umm-e-Habiba

Bahria University Journal of Information & Communication Technologies, Volume 8, Issue 1

**Impact Factor:** 0

DOI: <https://www.bahria.edu.pk/ojs/index.php/bujict/article/view/86>

**Three Tier Unified Process Model for Requirement Negotiations and Stakeholder Collaborations**

2012

Muhammad Ashraf Khan Niazi Dr. Muhammad Abbas Muhammad Shahzad

International Journal of Advancements in Research & Technology, Volume 1, Issue 6

**Impact Factor:** 0

DOI:

[https://www.researchgate.net/publication/258650620\\_Three\\_Tier\\_Unified\\_Process\\_Model\\_for\\_Requirement\\_Negotiations\\_and\\_Stakeholder\\_Collaborations](https://www.researchgate.net/publication/258650620_Three_Tier_Unified_Process_Model_for_Requirement_Negotiations_and_Stakeholder_Collaborations)

## Conference Proceedings

**Image Steganography using Least Significant Bit (LSB) – A Systematic Literature Review**

2022

Muhammad Rashid Farooque Azam Muhammad Abbas Yawar Rasheed Muhammad Waseem Anwar Adnan Aslam Saud S. Alotaibi

2022 2nd International Conference on Computing and Information Technology (ICCIIT), res.country(233,)

**Citations:** 16

DOI: 10.1109/ICCIT52419.2022.9711628

**A Model Driven Framework for Efficient Bandwidth Allocation in Fog Computing Using Priority Algorithm**

2022

Mehwish Naz Muhammad Rashid Farooque Azam Muhammad Abbas Yawar Rasheed Mohammed H Sinky Muhammad Waseem Anwar

2022 2nd International Conference on Computing and Information Technology (ICCIIT), res.country(233,)

**Citations:** N/A

DOI: 10.1109/ICCIT52419.2022.9711637	
<b>A Novel Model Driven Framework for Image Enhancement and Object Recognition</b> <i>Wasi Haider Butt Yawar Rasheed Muhammad Abbas Muhammad Waseem Anwar Urooj Fatima</i> <i>International Conference on Information and Software Technologies, ICIST 2020, res.country(132,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1007/978-3-030-59506-7_2	2020
<b>SimFiller: Similarity-Based Missing Values Filling Algorithm</b> <i>Fateh ur Rehman Muhammad Abbas Sajjad Murtaza Wasi Haider Butt Usman Qamar Saad Rehman</i> <i>13th International Conference on Digital Information Management, res.country(57,)</i> <b>Citations:</b> N/A <b>DOI:</b> N/A	2018
<b>Object Recognition Using SVM Based Bag of Combined Features,</b> <i>Brig. Muhammad Abbas Fozia Mehboob Abdul Rauf</i> <i>Science and Information Conference 2018 , res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1007/978-3-030-01174-1_37	2018
<b>Comparative study of local binary pattern and its shifted variant for osteoporosis identification</b> <i>Hina Ajmal Farhan Hussain Muhammad Abbas Saad Rehman Aimal Khan Rupert Young Mohammad S. Alam</i> <i>SPIE Defense + Security 2018 Conference, res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1117/12.2304721	2018
<b>Implementation of Scrum in Pakistan's IT Industry</b> <i>Bilal Maqbool Fateh Ur Rehman Muhammad Abbas Saad Rehman</i> <i>2nd International Conference on Management Engineering, Software Engineering and Service Sciences, res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3180374.3181336	2018
<b>Implementation of Software Testing Practices in Pakistan's Software Industry</b> <i>Bilal Maqbool Fateh Ur Rehman Muhammad Abbas Saad Rehman</i> <i>ACM-ICMSS 2018 : ACM--2018 2nd International Conference on Management Engineering, Software Engineering and Service Sciences (ICMSS 2018)--Ei Compendex , res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3180374.3181340	2018
<b>Evaluation of trust management approaches in wireless sensor networks</b> <i>Farwa Kazmi Muazzam A. Khan Ayesha Saeed Nazar Abbas Saqib Muhammad Abbas</i> <i>2018 15th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST.2018.8312329	2018
<b>Numerical investigation of breathing in a long blunt nosed body at supersonic speed</b> <i>Naveed Akram Emad ud Din M. Arshad Farhan Abbas Ali Abbas Zaidi</i> <i>15th International Bhurban Conference on Applied Sciences and Technology, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST.2018.8312290	2018
<b>Numerical simulation of circulation control airfoil using RANS solver</b> <i>Ali Abbas Zaidi Janfizza Bukhari</i> <i>15th International Bhurban Conference on Applied Sciences and Technology, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST.2018.8312274	2018
<b>Design and development of low-speed water tunnel</b> <i>Mujahid Saeed Dr. Emad Uddin Dr. Aamir Mubashar Salim Uddin Zahir Ali Abbas Zaidi</i> <i>15th International Bhurban Conference Applied Sciences and Technology (IBCAST), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST.2018.8312288	2018
<b>Evaluation of Trust Management Approaches in Wireless Sensor Networks</b> <i>Muazzam Khattak Farwa Kazmi Ayesha Saeed Dr. Nazar Abbas Saqib Dr. Muhammad Abbas</i> <i>15th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)</i>	2018

<p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/IBCAST.2018.8312329</p>	
<p><b>A Novel Technique for Recognition and Tracking of Moving Objects Based on E-MACH and Proximate Gradient (PG) Filters</b></p> <p><i>Muazzam Khattak Haris Masood Dr. Saad Rahman Dr. Qaiser Chaudhary Dr. Muhammad Abbas M.Alam2 Rupert Young</i></p> <p><i>20th IEEE International Conference of Computer and Information Technology (ICCIT) , res.country(19,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/ICCITECHN.2017.8281849</p>	2017
<p><b>A Novel Technique for Recognition and Tracking of Moving Objects based on E-MACH and Proximate Gradient (PG) Filters</b></p> <p><i>Haris Masood Saad Rehman Muazzam Khan Qaiser Javed Muhammad Abbas Muhammad Alam Rupert Young</i></p> <p><i>20th IEEE International Conference on Computer and Information Technologies, res.country(19,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/ICCITECHN.2017.8281849</p>	2017
<p><b>FIG based Quality Assurance in Software Product Lines</b></p> <p><i>Nazish Yousaf Rida Sheikh Muhammad Abbas</i></p> <p><i>2017 International Conference on Frontiers of Information Technology (FIT), res.country(177,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/FIT.2017.00038</p>	2017
<p><b>Evaluation of Team Expertise in Software Development Organizations</b></p> <p><i>Muhammad Qasim Riaz Muhammad Abbas Sufian Irshad</i></p> <p><i>2017 International Conference on Frontiers of Information Technology (FIT), res.country(177,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/FIT.2017.00018</p>	2017
<p><b>AAGV: A Cluster Based Multicast Routing Protocol for Autonomous Aerial and Ground Vehicles Communication in VANET</b></p> <p><i>Muazzam Khattak Waqar Farooq Saad Rehman Nazar Abbas Saqib Muhammad Abbas</i></p> <p><i>15th International Conference on Frontiers of Information Technology (FIT 2017), res.country(177,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/FIT.2017.00063</p>	2017
<p><b>AAGV: A Cluster Based Multicast Routing Protocol for Autonomous Aerial and Ground Vehicles Communication in VANET</b></p> <p><i>Waqar Farooq Muazzam Ali Khan Saad Rehman Nazar Abbas Saqib Muhammad Abbas</i></p> <p><i>International Conference on Frontiers of Information Technology (FIT) held from 18-20 Dec 2017 in Pakistan , res.country(177,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/FIT.2017.00063</p>	2017
<p><b>The Impact of Agile Methodology (DSDM) on Software Project Management</b></p> <p><i>Aiman Khan Nazir Iqra Zafar Muhammad Abbas</i></p> <p><i>International Conference on Engineering, Computing &amp; Information Technology (ICECIT 2017) , res.country(157,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> N/A</p>	2017
<p><b>Team Interaction for Successful Project Management in Software Development</b></p> <p><i>Munazza Ansar Raheela Bibi Muhammad Abbas</i></p> <p><i>International Conference on Engineering, Computing &amp; Information Technology (ICECIT 2017), res.country(157,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> N/A</p>	2017
<p><b>A Study on Uncertainties in Software Project Management in Pakistan</b></p> <p><i>Sara Tanvir Mamoon Saifdar Hanny Tufail Aimal Khan Muhammad Abbas</i></p> <p><i>International Conference on Engineering, Computing and Information Technology, res.country(157,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> <a href="https://www.researchgate.net/publication/330509417_A_study_on_Uncertainties_in_Software_Project_Management_in_Pakistan">https://www.researchgate.net/publication/330509417_A_study_on_Uncertainties_in_Software_Project_Management_in_Pakistan</a></p>	2017
<p><b>A Comparative Study of Types, Tools and Techniques in Solar Irradiance Forecasting</b></p> <p><i>Kanza Sheikh Saad Rehman Muhammad Abbas Qaiser Chaudry</i></p> <p><i>Information Technologies, Systems And Networks, Chisinau, Moldova</i></p> <p><b>Citations:</b> N/A</p>	2017

<b>DOI:</b> <a href="https://ibn.idsi.md/sites/default/files/imag_file/338-349.pdf">https://ibn.idsi.md/sites/default/files/imag_file/338-349.pdf</a>	
<b>Quality of The Software Products and Their Successfulness.</b> <i>Muazzam Khattak Maryam Gillani Muhammad Abbas Saad Rehman Ata Ullah</i> <i>2nd International Conference on Information Technologies, Systems and Networks (ITSN-2017)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="https://ibn.idsi.md/ro/vizualizare_articol/60414">https://ibn.idsi.md/ro/vizualizare_articol/60414</a>	2017
<b>Tracking of Fixed Shape Moving Objects based on Modified Particle Filters</b> <i>Haris Masood Saad Rehman Muazzam Khan Qaiser Javed M.Abbas M.Alam Rupert Young</i> <i>19th International Conference on Computer and Information Technology, res.country(19,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICCITECHN.2016.7860202	2016
<b>Systematic Literature Review: Ingenious Software Project Management while narrowing the impact aspects</b> <i>Mudassar Adeel Ahmed Imran Ahsan Muhammad Abbas</i> <i>International Conference on Research in Adaptive and Convergent Systems RACS '16, res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/2987386.2987422	2016
<b>Traffic Event Detection from Road Surveillance Videos based on Fuzzy Logic</b> <i>Fozia Mehboob Muhammad Abbas Richard Jiang</i> <i>2016 SAI Computing Conference (SAI), res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/SAI.2016.7555981	2016
<b>Automated Vehicle Density Estimation from Raw Surveillance Videos</b> <i>Fozia Mehboob Muhammad Abbas Muhammad Atif Tahir Richard Jiang Somaya Al-Maadeed Ahmed Bouridane</i> <i>2016 SAI Computing Conference (SAI), res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/SAI.2016.7555981	2016
<b>Traffic Flow Estimation from Road Surveillance Videos</b> <i>Fozia Mehboob Muhammad Abbas Resheed Almotaryi Richard Jiang Somaya Al-Maadeed Ahmed Bouridane</i> <i>2015 IEEE International Symposium on Multimedia (ISM), res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ISM.2015.14	2015
<b>Identification of Risks in Pakistani IT Companies: A Survey Paper</b> <i>Mishall Fatima Khan Dr. Muhammad Abbas Dr. Mahmood Anwar Khan</i> <i>2014 IEEE 27th Canadian Conference on Electrical and Computer Engineering (CCECE), res.country(38,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/CCECE.2014.6900999	2014
<b>Critical success factors assessment in Software Projects</b> <i>Rabia Hashim Dr. Muhammad Abbas Muhammad Hashim</i> <i>IEEE Technically Co-Sponsored Science and Information Conference, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="https://ieeexplore.ieee.org/document/6661752">https://ieeexplore.ieee.org/document/6661752</a>	2013
<b>Software Project Management in virtual Teams</b> <i>Bakhtawar Seerat Marriam Samad Muhammad Abbas</i> <i>2013 Science and Information Conference, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="https://ieeexplore.ieee.org/document/6661728">https://ieeexplore.ieee.org/document/6661728</a>	2013
<b>Risks Factors Identification and Assessment in Virtual Projects of Software Industry: A Survey Study</b> <i>Iqra Basharat Tayyaba Nafees Dr Muhammad Abbas</i> <i>2013 Science and Information Conference, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="https://ieeexplore.ieee.org/document/6661735">https://ieeexplore.ieee.org/document/6661735</a>	2013
<b>Risk Management System for ERP Software Projects</b> <i>Muhammad Zaman Fakhar Dr. Muhammad Abbas Madiha Waris</i> <i>2013 Science and Information Conference, res.country(231,)</i>	2013

**Citations:** N/A

**DOI:** <https://ieeexplore.ieee.org/document/6661743>